WHAT IS CLAIMED IS:

1   1.   A method for assigning intelligent peripheral resources of a network,

2   comprising:

3   receiving a request for an intelligent peripheral service from a first

4   requesting element of any element in the network;

5   identifying an intelligent peripheral resource in response to the request;

6   and

7   assigning the identified intelligent peripheral resource to the first

8   requesting element.

1   2.   The method of claim 1, further comprising:

2   grouping the intelligent peripheral resources into one or more groups;

3   forwarding the request from a first group to a second group if intelligent

4   peripheral resources of the first group that received the request is not sufficient to meet

5   the request.

1   3.   The method of claim 1, further comprising:

2   grouping the intelligent peripheral resources into one or more groups, the

3   request being received by and assigned to a first group;

4   receiving an additional request in the first group for another intelligent

5   peripheral service from a second requesting element; and

6   assigning intelligent peripheral resource of the first group to the second

7   element if such intelligent peripheral resource is available in the first group.

1   4.   The method of claim 1, wherein the intelligent peripheral resources are

2   supplied by one or more intelligent peripherals, the identifying step identifying one of the

3   intelligent peripherals that is able to satisfy the request, the assigning step assigning the

4   identified intelligent peripheral to the request.

1   5.   The method of claim 1, wherein the request is received from a

2   packet-based media stream.

1   6.   The method of claim 1, wherein the request is received from a

2   circuit-switched based media stream.

1   7.   A concentrator for connecting intelligent peripherals to a network,

2   comprising:

3   at least one intelligent peripheral interface that connects one or more

4   intelligent peripherals;

5   at least one network interface; and

6   at least one routing device coupled to the at least one intelligent

7   peripheral interface and the routing device for selectively directing information from the

8   network to the intelligent peripheral.

1   8.   The concentrator of claim 7, further comprising:

2   at least one processor for processing information from the network and

3   information from the intelligent peripheral; and

4   a memory for storing at least one of intelligent peripheral status, request

5   information, capability information and network information.

1   9.   The concentrator according to claim 7, wherein the connection point for

2   connecting to the network uses one of packet-based or circuit-switched based technology.

1   10.   The concentrator according to claim 7, wherein the connection point for

2   connecting to the network uses at least one of TDM, ATM, IP, SONET, X.25 and ISDN.

1   11.   The concentrator according to claim 7, wherein at least one of the routing

2   device for directing information and the processor for processing information performs a

3   media format translation function.

1   12.   A system for utilizing intelligent peripheral resources of a network,

2   comprising:

3   at least one device coupled with at least one first switch, the switch being coupled

4   with at least one other switch through the network;

5   at least one intelligent peripheral concentrator coupled with the first switch

6   through the network; and

7   at least one intelligent peripheral coupled with the intelligent peripheral

8   concentrator.

1   13.   The system according to claim 12, further comprising:

2   at least one service control point connected to the switch through the network.

1   14.   The system according to claim 13, wherein the service control point

2   directs telephone calls to the intelligent peripheral concentrator or to another network

3   resource.

1   15.   The system according to claim 12, wherein the switch handles media

2   streams in TDM or packetized format.

1   16.   The system according to claim 12, wherein the intelligent peripheral

2   concentrator performs media format translation between a packet-based and a circuit-

3   based technology, and between different packet-based technologies.

1   17.   The system according to claim 12 wherein the intelligent peripheral

2   performs at least one of digit collection, voice and video playback, announcement

3   playback, voice and video recording, music recording and playback, collect call

4   processing, forwarding requests and information, pager notification and telephonic alerts.

1   18.   The system according to claim 12 wherein the intelligent peripheral

2   concentrator performs a resource allocation function by determining the status and

3   capability of the intelligent peripheral resources and assigning a request to an intelligent

4   peripheral based on the determination.

1   19.   The system according to claim 12, wherein the connections are at least one

2   of conventional telephone lines, digital transmission facilities, fiber optic lines, direct

3   serial/parallel connections, wireless connections, cellular telephone connections, satellite

4   communications, local area networks and intranet connections.

1   20.   An apparatus for assigning intelligent peripheral resources of a network,

2   comprising:

3   a network interface; and

4   a controller coupled with the network interface that receives a request from

5   a network device for the intelligent peripheral resources, determines an availability of the

6   intelligent peripheral resources in response to the request and assigns the network device

7   to an intelligent peripheral resource based on the availability of the intelligent peripheral

8   resources.